REQUEST FOR AQUIFER EXEMPTION
TULARE ZONE, ASPHALTO FIELD 26-30/22
BECHTEL PET. OPER., INC.

* KC Water will not (cannot) rule on this
* No production in this area of Asphalto
* TDS Tulare zone, Asphalto: 3,000 - 9,000 TDS (Rector)
* No known ground water monitoring wells in Sec. 26 } K.C. Water
* (*) No known wells of beneficial water use
* Tulare TDS values are inferred. No known 26Z-specific quality information.
* Tulare well in 27Z (TEPI 74T): 9180 TDS
* Stevens well in 26Z (#354): 31,000 TDS
* (*) Sumps in sec. 26Z
* Exemption for NE/4 of 26Z
* TDS Tulare zone 5050 - 6550 Bechtel contour (after Rector)
* Existing Tulare injection ~1 mi to NE - cum inj: 47.8 MM bbls

information that the applicant must submit, the Division should contact the water district in the area of the project.

This contact should be made to inform the water district of the project and to obtain written verification that the proposed injection aquifer will not reasonably be expected to be a source of drinking water. The criteria and information needed for an aquifer exemption vary, depending upon the amount of total dissolved solids within an aquifer and the present use or condition of an aquifer.

The following are the minimum criteria and information required by the EPA that the Division should request from an applicant for the aquifer exemption evaluation.

1. For an aquifer or a portion thereof, with fewer than 10,000 mg/1 TDS, there must be a determination by the applicant that:

   a. The aquifer is not a current source of drinking water; and

   b. The aquifer cannot now, and will not in the future, serve as a source of drinking water because the aquifer is mineral, hydrocarbon, or geothermal energy producing, or that the applicant can demonstrate that the aquifer contains minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible.

aquifer is not a current source of drinking water

The aquifer is hydro-carbon bearing. The aquifer also contains contamination from grandfathered injection

2. For an aquifer with a TDS level between 3,000 and 10,000 mg/1 TDS that is not reasonably expected to supply a public water system, the applicant must submit:

   a. A declaration that the aquifer is not a current source of drinking water and that the aquifer will not reasonably be expected to supply a public water system. This declaration should be made by a local water agency.

   b. Data on the depth and lateral extent of the aquifer and the location and depth of any drinking-water wells in the area. (The injection wells should be at least double the depth of the deepest well providing drinking water to qualify for an exemption).

   c. Information relative to the aquifer, such as:

      1. The distance to existing towns.
      2. The ownership and types of land-use in the area.
      3. The availability of alternate water sources to the area (surface and groundwater).
      4. Any unusual geology.

   d. The type of constituents and TDS in the formation fluid (preferably a water analysis).

   e. The yield of water.

170.3 NEW PROJECT APPLICATIONS (Data Required From An Operator)

An operator must submit a complete project plan, which includes data listed in the California Code of Regulations (CCR), Section 1724.7 for onshore projects, Section 1748.2 for offshore projects, and Section 1961 for geothermal projects. Project plans must be signed by the owner, agent, or officer of the company.

170.4 APPROVAL OF NEW PROJECTS

Requirements and surveillance procedures for injection projects are designed to ensure that the injected fluid is confined to the approved zone of injection and that adjoining operations will not be adversely affected. The condition of all wells within a finite area, known as the Area of Review (AOR), should be reviewed to ensure the protection of all oil and gas zones and all underground sources of drinking water (USDW). A thorough knowledge of the stratigraphy and subsurface conditions in the project area is essential prior to final project approval.

As a general rule, disposal into a nonhydrocarbon-producing zone should not be allowed to raise the zone pressure above that of hydrostatic pressure; however, exceptions may be made under certain conditions. Conditions that could be considered for an exception are: (1) the depth and areal extent of the zone; (2) the competency of the cap rock; (3) the condition of wells in the area; (4) and the absence of freshwater zones. However, an appropriate monitoring program must be required to ensure that no damage to adjacent properties will occur, either in the subsurface or at the surface.

The Division has a comprehensive memorandum of agreement (MOA) with the State Water Resources Control Board (SWRCB), whereby the permitting of surface waste-water disposal is regulated by SWRCB, and the Division regulates any underground injection of wastewater (see Exhibit 170.4 – Item 1). Also, the Division has an MOA with the EPA regarding public notification and aquifer exemptions (see Exhibit 170.4 – Item 2).

In accordance with the MOA's with the SWRCB and the EPA, the following are the procedures to use when an application for a new injection project is received (see Exhibit 170.4 – Item 3, Flow Chart):

A. If the proposed aquifer contains more than 10,000 mg/l TDS or is an exempted aquifer, proceed to Step D.

B. If the proposed aquifer contains fewer than 10,000 mg/l TDS and is an aquifer that has not been exempted by the EPA, then an aquifer exemption is necessary. The recommendation for exemption must be initiated by the Division to the EPA. The EPA must approve the exemption before the Division can approve the project.

   If the project applicant has not submitted data sufficient to make a recommendation on an exemption, the Division should request further information that can be used to justify the granting of an aquifer exemption. The request for additional information should occur only after a preliminary determination by the District has shown that the project will probably be approved if the aquifer exemption is granted. In addition to the